

In the Claims

Please amend the Claims as follows.

1. (Currently Amended) A system for streaming media to a viewer for a request for the media, the system comprising:

a stream routing processor executing instructions to:

receive reservation data comprising a valid reservation identification; and
transmit the valid reservation identification; ~~and~~

a stream caster to:

receive a reservation identification for the request;
receive the reservation data identifying the valid reservation identification from
the stream routing processor;
compare the reservation identification to the valid reservation identification to
determine if the reservation identification is valid; and
stream at least partially the media to the viewer when the reservation
identification is valid; ~~and~~

a switch controller to monitor the stream caster during streaming and notify the stream
routing processor of a status of the stream caster.

2. (Original) The system of claim 1 further comprising a plurality of stream casters configured to stream media from the system.

3. (Original) The system of claim 1 further comprising a switch controller configured to monitor a state of a system resource.

4. (Original) The system of claim 1 further comprising media storage configured to store the media.

5. (Original) The system of claim 1 further comprising a packet switch configured to transmit packets containing the media from the system.

6. (Original) The system of claim 5 wherein the packet switch comprises an internet protocol packet switch.

7. (Previously Presented) The system of claim 1 wherein the stream caster further is configured to transmit at least one information block comprising the reservation identification and at least one member of a group consisting of a session initiation, a session termination, and a viewing event for a session.

8. (Previously Presented) The system of claim 7 wherein the session comprises at least one member of a group consisting of an internet protocol session and a broadband connection.

9. (Previously Presented) The system of claim 1 wherein the stream routing processor further is configured to maintain a reservation state model comprising the reservation identification and at least one member of a group consisting of a session initiation, a session termination, and a viewing event.

10. (Currently Amended) A switch for streaming media to a viewer for requested media, the switch comprising:

a stream routing processor executing instructions to:

receive signaling inquiring if the switch can stream the requested media;
determine if the switch is configured to stream the requested media; and
receive reservation data comprising a valid reservation identification when the switch is configured to stream the media; ~~and~~

a stream caster to:

receive a reservation identification for the requested media;
receive from the stream routing processor the reservation data identifying the valid reservation identification;
compare the reservation identification to the valid reservation identification to determine if the reservation identification is valid; and
stream at least partially the requested media to the viewer when the reservation identification is valid; and

a switch controller to monitor the stream caster during streaming and notify the stream routing processor of a status of the stream caster.

11. (Original) The switch of claim 10 wherein the stream routing processor further is configured to monitor a state of the switch.

12. (Previously Presented) The switch of claim 11 wherein the state comprises at least one member of a group consisting of available bandwidth, required bandwidth for the requested media, version compatibility, storage capacity, and operating mode.

13. (Original) The switch of claim 10 wherein the stream routing processor further is configured to monitor a status of a media server.

14. (Previously Presented) The switch of claim 10 wherein the stream routing processor further is configured to transmit signaling to a routing processor identifying that the switch can provide the requested media.

15. (Original) The switch of claim 10 wherein the stream routing processor further is configured to record a state change in a state model for a session.

16. (Previously Presented) The switch of claim 15 wherein the state change identifies at least one member of a group consisting of the requested media, a streamed media, the reservation identification, a duration of media streamed, and a viewing event.

17. (Original) The switch of claim 10 wherein:
the stream caster comprises a first media server and a second media server;
the first media server is configured to stream a first portion of the requested media; and
the second media server is configured to stream a second portion of the requested media.

18. (Previously Presented) The switch of claim 17 wherein the stream routing processor is configured to record a state change comprising an identification of the first media server streaming the first portion and the second media server streaming the second portion.

19. (Original) The switch of claim 10 wherein:
the switch comprises a second stream caster;

the stream caster is configured to stream a first portion of the requested media; and
the second stream caster is configured to stream a second portion of the requested media.

20. (Previously Presented) The switch of claim 19 wherein the stream routing processor is configured to record a state change comprising an identification of the stream caster streaming the first portion and the second stream caster streaming the second portion.

21. (Original) The switch of claim 10 wherein the stream routing processor is configured to transmit signaling to, and receive signaling from, the stream caster to determine if the stream caster is configured to stream the requested media.

22. (Original) The switch of claim 21 wherein the stream routing processor determines that the stream caster is configured to stream the requested media and the stream routing processor is configured to transmit the reservation data to the stream caster and to transmit an acknowledgement to a routing processor.

23. (Original) The switch of claim 10 wherein the stream routing processor further is configured to transmit a message to the stream caster, to receive a response from the stream caster, and to process the response to determine if the stream caster is configured to stream the requested media.

24. (Previously Presented) The switch of claim 10 wherein the reservation data comprises a play list and the stream routing processor is configured to transmit the play list to the stream caster.

25. (Original) The switch of claim 10 wherein the switch is configured to communicate with a routing processor and wherein the stream routing processor is configured to transmit signaling to, and receive signaling from, the routing processor.

26. (Original) The switch of claim 10 wherein the stream routing processor is configured to communicate out-of-band to a broadband device.

27. (Original) The switch of claim 26 wherein the broadband device comprises a set top box.

28. (Original) The switch of claim 10 wherein the stream caster further is configured to accept a session upon receiving a valid reservation identification.

29. (Original) The switch of claim 28 wherein the stream caster is configured to process signaling received in the session to affect the media streaming.

30. (Previously Presented) The switch of claim 29 wherein the signaling comprises at least one member of a group consisting of a setup, a teardown, a status message, and a viewing event.

31. (Previously Presented) The switch of claim 29 wherein the session comprises at least one member of a group consisting of an internet protocol session and a broadband connection.

32. (Original) The switch of claim 10 wherein the stream caster is configured to report a state change to the stream routing processor.

33. (Original) The switch of claim 10 further comprising a switch controller configured to monitor a state of a switch resource.

34. (Original) The switch of claim 33 wherein the resource comprises a hardware component.

35. (Previously Presented) The switch of claim 33 wherein the switch controller is configured to report to the stream routing processor at least one member of a group consisting of a service impacting event and a capacity impacting event.

36. (Original) The switch of claim 10 further comprising a media storage configured to store the media.

37. (Original) The switch of claim 10 further comprising a packet switch configured to transmit packets containing the media from the switch.

38. (Original) The switch of claim 37 wherein the packet switch is configured for multicasting of a live event or a simulated live event.

39. (Original) The switch of claim 10 further comprising a packet switch configured to transmit packets containing signaling within the switch.

40. (Original) The switch of claim 39 wherein the packet switch comprises an internet protocol packet switch.

41. (Original) The switch of claim 39 wherein the packet switch is configured to transmit and receive out-of-band signaling.

42. (Original) The switch of claim 10 wherein the reservation data comprises a play list.

43. (Original) The switch of claim 10 wherein the stream routing processor is configured to transmit and receive signaling in-band.

44. (Original) The switch of claim 10 wherein the stream routing processor is configured to transmit and receive signaling out-of-band.

45. (Previously Presented) A system for streaming media to a viewer comprising:
a switch comprising:

a stream caster to:

accept a session from the viewer to stream at least partially a requested media upon both receiving and validating a reservation identification for the requested media using a valid reservation identification;

create at least one information block for a session, wherein the information block comprises the reservation identification, an identification of streamed media, and at least one member of a group consisting of a presentation identification, a media server identification, a stream caster identification, a media player identification, and a data packet path identification; and

a stream routing processor executing instructions to:

determine if the stream caster is configured to stream the requested media;
and receive reservation data comprising the valid reservation
identification when the stream caster is configured to stream the
requested media; and
transmit the valid reservation identification to the stream caster.

46. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to communicate signaling to and from the stream caster.

47. (Original) The system of claim 46 wherein the signaling comprises the reservation data.

48. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to communicate signaling to and from a routing processor.

49. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to communicate with a resource manager to determine if the stream caster has a resource available to stream the requested media.

50. (Previously Presented) The system of claim 49 wherein the resource comprises at least one second member of a second group consisting of a media server, processing capacity, and bandwidth.

51. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to record a status of at least one event or at least one device in the system.

52. (Previously Presented) The system of claim 51 wherein the status comprises at least one second member of a second group consisting of an active media stream, not to exceed capacity, and current capacity.

53. (Original) The system of claim 45 wherein the stream routing processor comprises a switch resource manager configured to monitor and to record status of resources in the system.

54. (Previously Presented) The system of claim 53 wherein the resources comprise at least one second member of a second group consisting of a stream caster, a media player, bandwidth, current capacity, and not to exceed capacity.

55. (Original) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to maintain a reservation state model for each attempted reservation using the reservation identification.

56. (Original) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to maintain a reservation state model for a session and to receive from the stream caster and record each state change, wherein the state model identifies the session using the reservation identification.

57. (Previously Presented) The system of claim 56 wherein the state change comprises at least one second member of a second group consisting of a setup, a teardown, and a viewing event.

58. (Previously Presented) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to create the at least one information block for a session.

59. (Cancelled)

60. (Original) The system of claim 45 wherein the stream routing processor comprises a log data system configured to transmit log data from the system.

61. (Previously Presented) The system of claim 60 wherein the log data comprises at least one second member of a second group consisting of an information block and a signaling log.

62. (Previously Presented) The system of claim 60 wherein the log data comprises at least one second member of a second group consisting of a historical pull interface and a real time push interface.

63. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to transmit session and state information to the stream routing processor and to receive and processes signaling from the stream routing processor.

64. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to generate signaling logs and media server logs.

65. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to receive and process signaling from the viewer and to transmit signaling and media to the viewer.

66. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session controller configured to monitor and store session information and to transmit session information to the stream routing processor.

67. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session controller configured to obtain status information from a media server.

68. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session controller configured to transmit and receive signaling to and from the stream routing processor, including the valid reservation identification.

69. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive and process raw signaling from the viewer.

70. (Previously Presented) The system of claim 69 wherein the signal wrapper subsystem comprises a signal proxy configured to transmit the raw signaling for use by the stream routing processor to maintain a state model.

71. (Previously Presented) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive the reservation data, including the

valid reservation identification, and to validate the reservation identification received from the viewer using the valid identification reservation.

72. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to accept or deny an attempted session based on validating the received reservation identification.

73. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive signaling for a session and to transmit the signaling to a media server.

74. (Previously Presented) The system of claim 73 wherein the signal proxy further is configured to transmit the signaling to another media server if the media server cannot stream the requested media.

75. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to bind a media server to a public internet protocol address.

76. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to transmit media streamed from a media server to the viewer.

77. (Original) The system of claim 76 wherein the stream proxy further is configured to transmit media streamed from another media server to the viewer if the media server is not able to stream the media.

78. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to receive signaling from the viewer and to transmit the signaling to a media server.

79. (Original) The system of claim 78 wherein the signaling comprises a status of the streaming media.

80. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a media server configured to stream media to the viewer.

81. (Original) The system of claim 80 wherein the media server further is configured to generate at least one media log comprising the reservation identification.

82. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a media log configured to store media logs generated by a media server.

83. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a data collector configured to collect raw signaling and to process the raw signaling to create at least one signaling log.

84. (Previously Presented) The system of claim 83 wherein the data collector further is configured to transmit the signaling log to a log data system.

85. (Previously Presented) The system of claim 45 wherein the stream caster comprises a log data system configured to receive and transmit at least one second member of a second group consisting of signaling logs and media logs.

86. (Previously Presented) The system of claim 85 wherein the log data system comprises a log data control configured to receive the signaling logs, to control transmitting the signaling logs from the system, and to control storage of the signaling logs when the log data system is configured to receive and transmit the signaling logs.

87. (Previously Presented) The system of claim 86 wherein the log data system comprises a log storage configured to store the signaling logs.

88. (Previously Presented) The system of claim 86 wherein the log data system comprises a real-time push interface configured to transmit the signaling logs from the system in real time.

89. (Previously Presented) The system of claim 85 wherein the log data system comprises a historical pull interface configured to receive a request for signaling logs and to transmit requested signaling logs.

90. (Original) The system of claim 85 wherein the log data system comprises a file transfer protocol interface configured to transmit a closed signaling log from the system.

91. (Original) The system of claim 45 further comprising a broadband service controller configured to monitor a broadband connection to determine if the broadband connection is active.

92. (Previously Presented) The system of claim 45 further comprising a broadband service controller configured to monitor a broadband connection to determine if the broadband connection has a quality of service.

93. (Previously Presented) The system of claim 45 further comprising a broadband service controller configured to record a state of a broadband connection.

94. (Previously Presented) The system of claim 93 wherein the broadband service controller comprises a circuit database configured to store a status of the broadband connection.

95. (Original) The system of claim 45 further comprising a human machine interface configured to enable human access to configure the system.

96. (Previously Presented) The system of claim 95 wherein the human machine interface comprises at least one ninth member of a ninth group consisting of a web browser, a graphical based terminal session, and a command interface.

97. (Previously Presented) The system of claim 45 further comprising a network manager configured to monitor status of a component in the system.

98. (Original) The system of claim 97 wherein the network manager comprises a stream caster controller configured to monitor and to report status of the stream caster.

99. (Original) The system of claim 97 wherein the network manager comprises an SRP controller configured to monitor and to report status of the stream routing processor.

100. (Original) The system of claim 97 wherein the network manager comprises a media storage controller configured to monitor and to report status of a media storage.

101. (Original) The system of claim 97 wherein the network manager comprises a signaling controller configured to monitor and to report status of a signaling component.

102. (Previously Presented) A switch for streaming media to a viewer comprising:
a stream caster to accept a session from the viewer to stream at least partially a requested media upon receiving and validating a reservation identification using a valid reservation identification, wherein validating the reservation identification comprises comparing the reservation identification to the valid reservation identification at the stream caster to determine if the reservation identification is valid;
a stream routing processor executing instructions to:
determine if the stream caster is configured to stream the requested media,
receive reservation data comprising the valid reservation identification when the stream caster is configured to stream the requested media, and
transmit the valid reservation identification to the stream caster; and
a switch controller to monitor the stream caster during streaming and to notify the stream routing processor of a status of the stream caster.

103. (Cancelled)

104. (Cancelled)

105. (Cancelled)

106. (Cancelled)

107. (Currently Amended) A method for streaming media from a switch comprising:
determining if a stream caster of the switch is configured to stream a requested media;
receiving reservation data comprising a valid reservation identification at the stream caster; and
accepting a session to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification at the stream caster, wherein validating the reservation identification comprises comparing the reservation identification to the valid reservation identification at the stream caster to determine if the reservation identification is valid; and
monitoring the stream caster during streaming and notifying a status of the stream caster.

108. (Previously Presented) The method of claim 107 wherein the determining comprises transmitting a message to the stream caster inquiring if the stream caster is configured to stream the requested media and receiving another message from the stream caster at a stream routing processor acknowledging the message inquiring if the stream caster is configured to stream the requested media.

109. (Original) The method of claim 108 further comprising transmitting a third message to a routing processor identifying the stream caster as being configured to stream the requested media and identifying an address of the stream caster.

110. (Original) The method of claim 109 further comprising receiving at the stream routing processor from the routing processor a fourth message comprising the reservation data.

111. (Previously Presented) The method of claim 109 wherein the address comprises an internet protocol address.

112. (Original) The method of claim 107 further comprising receiving the reservation identification at an address of the stream caster and, if validated, accepting the session at the address.

113. (Previously Presented) The method of claim 112 wherein the address is transmitted from the stream routing processor after the stream routing processor determines that the stream caster is configured to stream the requested media.

114. (Original) The method of claim 107 further comprising receiving a setup message at the stream caster and acknowledging the setup message.

115. (Original) The method of claim 107 further comprising streaming the requested media, at least partially.

116. (Previously Presented) The method of claim 115 further comprising receiving a viewing event and changing the requested media being streamed accordingly.

117. (Original) The method of claim 107 further comprising using a packet switch to communicate between the stream routing processor and the stream caster.

118. (Original) The method of claim 107 further comprising using a packet switch to transmit requested media from the stream caster.

119. (Original) The method of claim 107 further comprising receiving at the stream caster in-band signaling.

120. (Previously Presented) The method of claim 108 further comprising receiving at the stream routing processor out-of-band signaling.

121. (Previously Presented) The method of claim 107 further comprising using in-band signaling to communicate with a viewer.

122. (Previously Presented) The method of claim 108 further comprising using out-of-band signaling to communicate with a viewer.

123. (Original) The method of claim 107 further comprising receiving a teardown message at the stream caster and terminating the session.

124. (Original) The method of claim 107 further comprising transmitting at least one signaling log from the stream caster, the signaling log comprising the reservation identification.

125. (Previously Presented) The method of claim 124 wherein the signaling log comprises at least one member of a group consisting of setup data, termination data, and a viewing event.

126. (Previously Presented) The method of claim 108 further comprising transmitting at least one information block from the stream routing processor, the information block comprising the reservation identification.

127. (Previously Presented) The method of claim 126 wherein the information block comprises at least one member of a group consisting of setup data, termination data, a viewing event, a media server identification, and an identification of streamed media.

128. (Previously Presented) The method of claim 108 further comprising transmitting a plurality of information blocks from the stream routing processor, each of the plurality of information blocks each comprising the reservation identification.

129. (Previously Presented) The method of claim 128 further comprising transmitting each information block at the occurrence of at least one member of a group consisting of setup, termination, a viewing event, and a configurable period of time.

130. (Currently Amended) A method for streaming media from a switch comprising:
receiving at a stream caster of the switch reservation data comprising a valid reservation identification;
comparing a reservation identification received at the stream caster to the valid reservation identification to determine if the reservation identification is valid;
and
terminating an attempted session to stream requested media upon determining that the reservation identification is not valid; and
monitoring the stream caster and notifying a status of the stream caster.

131. (Original) The method of claim 130 further notifying a stream routing processor that the stream caster received an invalid reservation identification and that the attempted session was terminated.

132. (Currently Amended) A method for streaming requested media from a switch comprising:
receiving at a stream routing processor signaling inquiring if the switch is configured to stream the requested media;
determining at the stream routing processor if the switch is configured to stream the requested media, and, if so, acknowledging the inquiry;
receiving reservation data at the stream routing processor, the reservation data comprising a valid reservation identification;
receiving a reservation identification at a streaming device of the switch;

comparing the reservation identification received at the streaming device to the valid reservation identification to determine if the reservation identification is valid;
and
streaming at least partially the requested media from the streaming device when the reservation identification is determined to be valid; and
monitoring the streaming device during streaming and notifying a status of the streaming.

133. (Previously Presented) A method for streaming media to a viewer comprising:
determining if a streaming device of a switch is configured to stream requested media,
and, if so, receiving reservation data comprising a valid reservation identification
and transmitting the valid reservation identification; ~~and~~
accepting a session from the viewer at the streaming device to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification at the streaming device, wherein validating the reservation identification comprises comparing the reservation identification to the valid reservation identification at the streaming device to determine if the reservation identification is valid; and
monitoring the streaming device during streaming and notifying a status of the streaming device.

134. (Currently Amended) A method for streaming media from a switch comprising:
determining at a stream routing processor if a streaming device of the switch is configured to stream requested media;
receiving reservation data comprising a valid reservation identification at the stream routing processor and transmitting the valid reservation identification to the streaming device;
accepting a session to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification at the streaming device, wherein validating the reservation identification comprises comparing the reservation identification to the valid reservation identification at the streaming device to determine if the reservation identification is valid; and

monitoring the streaming device during streaming and notifying the stream routing processor of a status of the streaming device.

135. (Cancelled)

136. (Cancelled)

137. (Cancelled)

138. (Cancelled)

139. (Cancelled)

140. (Cancelled)